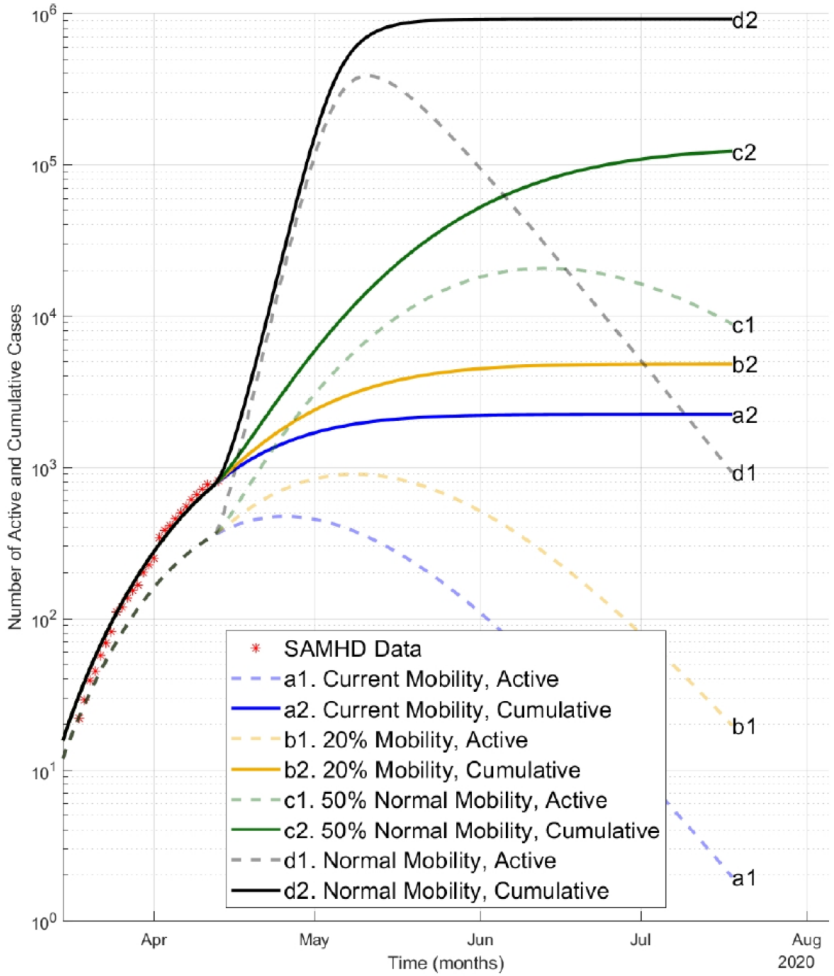
UTSA

UTSA Covid19 Modeling Update (April 15, 2020)

Model 1: Predictive Mathematical Modeling (Dr. Juan B. Gutiérrez and team)



a. **Current conditions**: 3,600 total cases
Peak by the third week of April: 700 active cases

b. **20% increase in mobility from now**: 8,500 total cases
Peak in mid-May: 1,500 active cases

c. **50% increase in mobility from now**: 300,000 total cases
Peak in mid-June: 48,000 active cases

d. **Return to normal**: 920,000 total cases
Peak one month after lifting restrictions
Peak of 380,000 active cases.

NOTE: This modeling scenario uses 4/15 as the day to eliminate mobility restrictions. This model accounts for the SA Emergency Declaration

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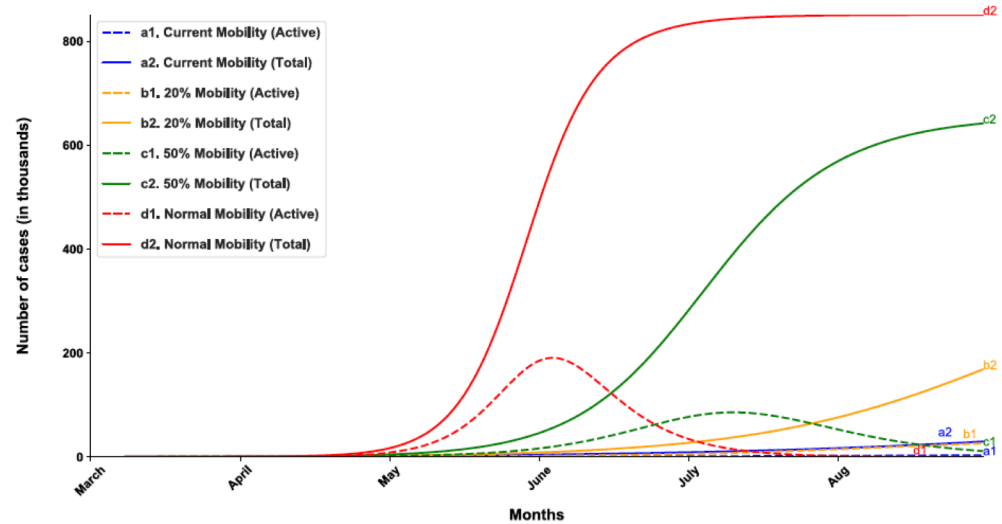
Model 2: AI Theoretical Model of Scenarios (Dr. Dhireesha Kudithipudi and team)



a. Current mobility: 1989 (as of May)/29818 total cases (as of late August)
Slow Peak by Mid-May

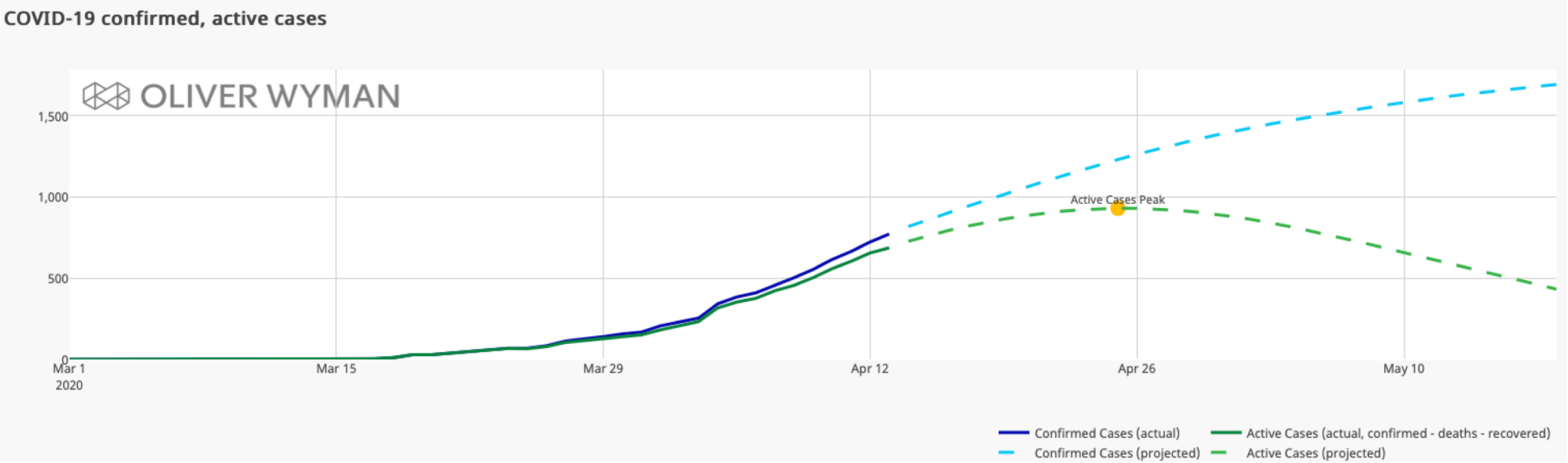
b. 20% mobility (20% population returning to normal mobility): 168,804 total cases
Peak in July: 26,171 active cases

c. 50% mobility (50% population returning to normal mobility): 641,000 total cases
Peak in mid-late June: 85,911 active cases

d. Return to normal mobility: 850,608 total cases
Peak one month after lifting restrictions: 190,804 active cases.

Note: ~ 10-day latency between becoming infected / positive confirmation (due to incubation period / testing latency) are accounted in the model. Mobility data is real-time location data for Bexar County and is updated weekly. An incubation period of ~5 days is considered in our model. Effective social distancing measure: 03/20. Actual cases are expected to be ~50% higher than reported, due to testing shortages (avg. scenario).

Oliver Wyman (national corporation) https://healthmap.us-west-2.owlabs.io/graph
Total Cases: 1,700 (through May)
Peak: Late April



UW- IHME (only projects for state of Texas) https://covid19.healthdata.org/united-states-of-america/texas
Total Cases: not estimated
Peak (as measured by peak resource use): late April